

Application No. 10/697,413
Amendment dated May 20, 2005
Reply to Office Action of March 3, 2005
Attorney Docket No. 1731D1/RC

REMARKS

Applicants note with appreciation the courteous telephone interview of May 5, 2005, granted by the Examiner to Applicants' attorney William J. Uhl. A summary of the issues and Applicants' position as discussed at the interview follow:

Claims 45-62 and 84 remain pending in the present application. Claims 63-83 and 85-98 have been cancelled pursuant to the outstanding restriction requirement.

In view of the above amendment to the claims, there remain two issues in the rejection of the present application, namely, the rejection of claims 42-62 and 84 under 35 U.S.C. 103(a) and the double patenting rejection.

Applicants have continued prosecution of the present application in a Request for Continued Examination ("RCE") after a Final Rejection and refusal to enter Applicants' previously submitted amendment. The refusal was based on what the Examiner believed were new issues. Also, the Examiner did not believe the "product by process" limitations added by the amendment establishes unobvious differences from the prior art.

35 U.S.C. 103(a) rejection

Dealing specifically with the 35 U.S.C. 103(a) rejection, the Examiner has maintained the rejection over the Barkac et al. reference, U.S. 6,191,225. In view of the

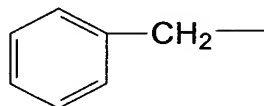
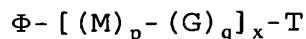
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amendments to the claims, it is felt that this rejection should be withdrawn.

A principal distinction between the claims of the present invention and the Barkac et al. disclosure is that the components (a) and (b) in Barkac et al. are prepared by atom transfer radical polymerization (ATRP), whereas in the present invention, the flow control agent is prepared by conventional free radical initiated polymerization. In the Barkac et al. ATRP polymerization, transition metals are used as the catalyst to cause the polymerization. In contrast, the flow control agents of Applicants' invention as now claimed are prepared in the presence of conventional free radical initiators and in the absence of transition metals. Thus, the claims now distinguish over the components (a) and (b) of the Barkac et al. reference.

The Advisory Action mailed April 11, 2005 did not enter the amendment as it allegedly raised new issues and allegedly further did not establish unobvious differences over the Barkac et al. prior art. In fact, there are unobvious differences between copolymers prepared by conventional free radical initiators and copolymers prepared by atom transfer radical polymerization (ATRP) initiators. In ATRP polymerization, which uses transition metals such as copper and initiators such as halides, the initiator becomes part of the polymer. For example, when the ATRP initiator benzyl

chloride is used in conjunction with copper, the benzyl radical and the chloride radical become part of the copolymer.



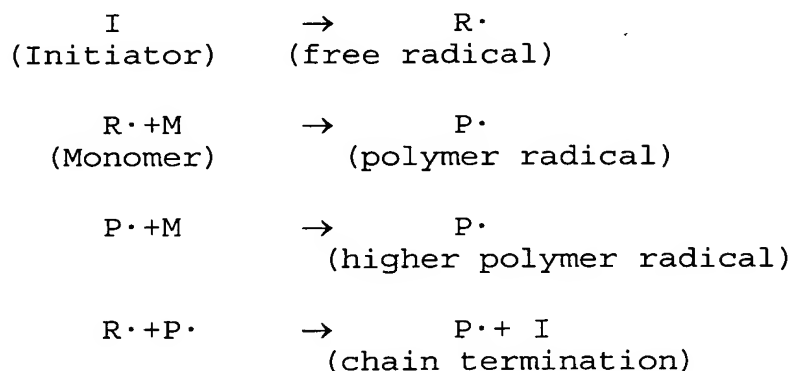
where Φ = benzyl radical

and T = chloride radical Cl^- .

M and G are different polymer blocks with p and x indicating the respective degrees of polymerization.

See column 13, line 20, to column 14, line 28 of Barkac et al.

With conventional free radical initiators on the other hand, such as peroxide and azo compounds, the initiator does not become part of the copolymer chain. The initiator initiates a radical that reacts with the monomer to form a polymeric radical that reacts with additional monomer to form a higher polymer.



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Therefore, there are significant differences between the copolymers of Applicants' claims and those of Barkac et al.

Double Patenting Rejection

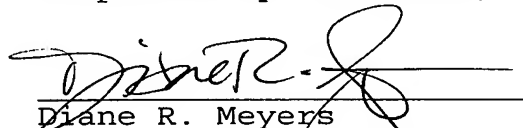
Dealing now with the double patenting rejection, Applicants have submitted with their last response a Terminal Disclaimer that should be sufficient to remove the obvious double patenting rejection over Rechenberg et al.

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CONCLUSION

In view of the present amendment to the claims and the Terminal Disclaimer, it is felt that Applicants' claims are in condition for allowance and an early and favorable response to this amendment is respectfully requested.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Diane R. Meyers", is written over a horizontal line.

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